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Hospitality Equipment 2020 P/L
Unit 6/6 Tennyson Street, Clyde, NSW, 2142 Tel.02 9637 3737 Fax.02 9637 3434

LAVA-OGGETTI
LAVE-BATTERIE
WARE WASHER
ZUBEHÖRE-SPÜLERE

P550-ek
P700-ek

MANUALE ISTRUZIONI
INSTRUCTIONS D'EMPLOI
INSTRUCTIONS MANUAL
INSTALLATION-BEDIENUNG

CE

REV.04/01/2010

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Unit 6/6 Tennyson Street, Clyde, NSW, 2142 Tel.02 9637 3737 Fax.02 9637 3434 E.info@he2020.com.au

DICHIARAZIONE DI CONFORMITA' - DECLARATION OF CONFORMITY

Noi - The following - Nous soussignés - Die Unterzeichnete Fa:

dichiariamo sotto la nostra esclusiva responsabilità che il prodotto
hereby declares under full responsability that the following product
attestons sous notre entière responsabilité que le produit suivant
erklärt unter eigener Verantwortung, dass folgende Produkte

LAVAOGGETTI - LAVE-BATTERIE - WARES-WASHER – ZUBEHÖRE-SPÜLER

mod. **P550-ek/P700-ek**

al quale questa dichiarazione si riferisce è conforme alle seguenti norme:
for which this declaration refers to the conformity of the following standards:
auquel se réfère cette déclaration, est conforme aux normes suivantes:
auf welche sich diese Erklärung bezieht, folgendem Standard entsprechen:

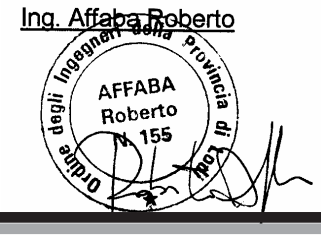
- *Sicurezza degli apparecchi elettrici d'uso domestico e similare - Norme generali EN60335-1(2002) + A1/A11(2004) + A12 (2006) + A2 (2006).*
- Safety of household and electrical appliances - General requirements EN60335-1(2002) + A1/A11(2004), A12 (2006) + A2 (2006)
- Sicurezza degli apparecchi elettrici d'uso domestico e similare - Norme particolari per lavastoviglie per uso collettivo EN60335-2-58 (2005)
- *Safety of household and electrical appliances - Part 2^ Particular requirements for commercial electric dishwashing machines EN60335-2-58 (2005)*
- Apparecchi elettrici per uso domestico e similare – Campi elettromagnetici – Metodi per la valutazione e la misura EN50366 (2003) + A1 (2006)
- *Household and similar electrical appliances – Electromagnetic fields – Methods for evaluation and measurements EN50366(2003) +A1(2006)*
- Limiti e metodi di misura delle caratteristiche di radiodisturbo degli apparecchi elettrodomestici, e similari a motore o termici, degli utensili e degli apparecchi elettrici similari. EN 55014 –1(2000) + A1(2001) + A2(2002)
- *Limits and methods of measurement of radio disturbance characteristics of electrical motor-operated and thermal appliances for households and similar purposes, electric tools and similar electric apparatus - EN 55014-1(2000) + A1(2001) + A2(2002)*
- Limiti per le emissioni di corrente armonica (apparecchiature con corrente di ingresso ≤ 16 A per fase) - EN 61000-3-2(2000) + A2 (2005)
- *Limits for harmonic current emissions (equipment input current ≤ 16 A per phase) - EN 61000-3-2(2000) + A2 (2005)*
- Limitazione delle fluttuazioni di tensione e dei flicker in sistemi di alimentazione in bassa tensione per apparecchiature con corrente nominale ≤ 16 A. EN 61000-3-3(1995) +A1(2001)+A2(2005)
- *Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current ≤ 16 A. EN 61000-3-3(1995) +A1(2001) + A2(2005)*
- Requisiti di immunità per apparecchi elettrodomestici, utensili e degli apparecchi elettrici similari EN 55014-2(1997)+ A1(2001)
- *Immunity requirements for household appliances, tools and similar apparatus. Product family standard EN 55014-2(1997) + A1(2001)*
- Safety of machinery Basic concepts, general principles for design - Basic terminology, methodology-ISO 12100-1 (2003).
- *Sicurezza del macchinario, Concetti fondamentali, principi generali di progettazione - Terminologia di base, metodologia – EN ISO 12100-1 (2003).*
- Safety of machinery - Basic concepts, general principles for design - Technical principles-ISO 12100-2 (2003).
- *Sicurezza del macchinario, Concetti fondamentali, principi generali di progettazione - Specifiche e principi tecnici – EN ISO 12100-2 (2003).*

in base a quanto previsto dalle Direttive:
selon ce qui est prévu par les Directives:
on the basis of what is foreseen by the Directives:
aufgrund der vorgesehenen Richtilinien: **2006/95/CE, 2004/108/CE, 2006/42/CE.**
2006/95/EC, 2004/108/EC, 2006/42/EC.

Decliniamo ogni responsabilità per sinistri a persone o a cose derivanti da manomissioni da parte di terzi o da carenze di manutenzione o riparazione.
Nous déclinons toute responsabilité pour sinistres à personnes ou à objets qui derivent de l'intervention de la part de tiers non specialistes ou de carences de manutention ou reparation.
We decline any responsability for injuries or damage derived from machine misuse, abuse by others or improper machine maintenance or repairs.
Wir lehnen jegliche Verantwortung für Schäden an Personen oder Dingen ab, die auf fehlerhaftes Eingreifen Dritter oder auf mängelhafte Wartung oder Reparation zurückzuführen.

li 01/01/09
(data/date/Datum)

Il socio amministratore / the administrator
Ing. Affaba Roberto



WASTE OF ELECTRICAL AND ELECTRONIC EQUIPMENT DIRECTIVE (WEEE,RAEE in Italy) 2002/96/EC AND SUBSEQUENT 2003/108/EC

The marking shown below indicates that the product cannot be disposed of as part of normal household waste. Electrical and Electronic Equipment (EEE) can contain materials harmful to health and the environment, and therefore is subject to separate waste collection: it must be disposed of at appropriate waste collection points or returned to the distributor against purchase of new equipment of similar type or having the same functions.
The directive mentioned above, to which make reference for further details, provides for punitive actions in case of illegal disposal of such waste.

LAMBER, manufacturer of this equipment, is enrolled in the Italian WEEE Register – the Register of Producers of Electrical and Electronic Equipment- from the 18th /02/2008 with the number **IT08020000000617.**

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GENERAL NORMS ENGLISH

Thank You for purchasing our WARES-WASHER Machine.

Perfect washing-up results as far as hygiene concerns and a correct operation of the dishwashing machine can be assured only in case the instructions reported in the present manual are carefully followed.
We hope the information reported in the present manual will be helpful to You.
They are based on data and our best updated knowledge.
Carefully read the Instructions reported in the manual, recommendations and suggestions included.
Carefully read the terms of sale too, the ones limiting warranty included.

INTRODUCTION AND SAFETY NOTES

ENGLISH

INTRODUCTION

- **The machine is an Industrial Wares-washing machine .**

- Noise level of the machine, less than 70 dB(A).

PRELIMINARY OBSERVATION

Carefully read the instructions reported in the present user manual, as it gives important indications about safety of installation, operation and maintenance:

- **carefully keep the present manual for further consultations;**
- the illustrations and drawings showing the machine are intended for general reference only and are not necessarily accurate in every instance;
- the dimensions and characteristics of the machine, given in this Manual, are not to be considered binding and may be changed without prior notice;
- having removed the packing material, check that all the equipment is present. If there is any doubt, do not use it and contact qualified personnel. The packing elements (plastic bags, nails, etc.) should be kept away from children, because they are dangerous.

GENERAL SAFETY REGULATIONS

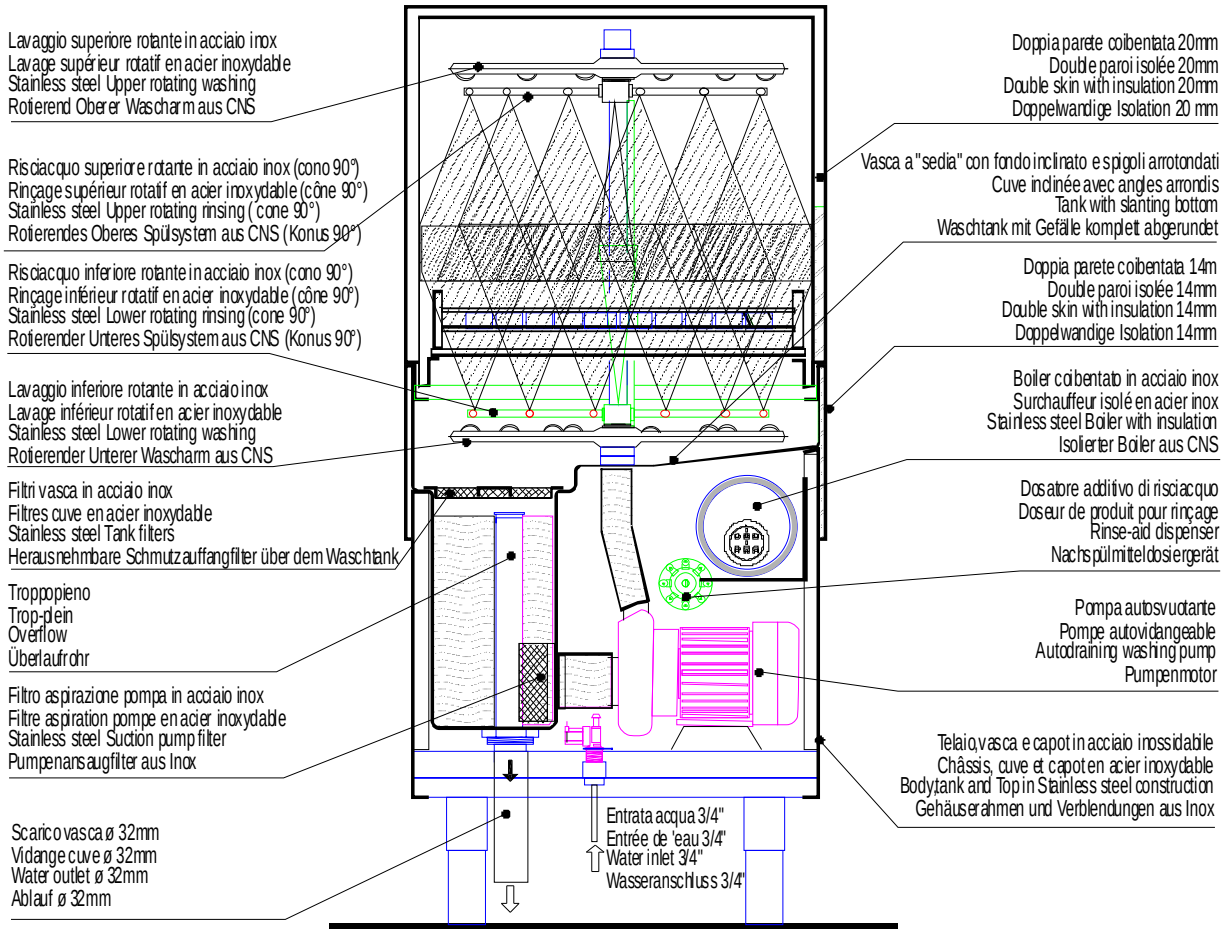
THIS SAFETY CODE HAS BEEN COMPILED IN YOUR INTEREST. Strict adherence to these rules will reduce the risks of injury both to yourself and to others;
Personnel working with this machine must adhere strictly to all statutory safety regulations as well as the specific rules listed below. Failure to do so may result in personal inyury and damage to the machine;

- DO NOT attempt to move, install, set-up or operate this machine until you have read and fully understood this Manual. If doubt persists, ask your supervisor;
- never leave tools, parts or other loose material on or in the machine;
- Before switching the equipment the equipment on, make sure that the model plate data conforms to that of the electrical and water distribution network;
- remember that even with the mains indicator in the “OFF” position, the incoming cables are still live;
- BEFORE starting the machine or the cycle, after any maintenance or repair work, make sure all protective are correctly installed;
- be vigilant at all times, remember that your safety and that of your fellow workers depends on you;
- when moving or lifting the machine, care must be taken to comply with all the relevant regulations governing such operations;
- installation should be carried out by qualified personnel according to the manufacturer's instructions.
- this equipment should be destined to the use which it has been conceived for. Any other application should be considered improper and consequently dangerous;
- the equipment should only be used by personnel trained for its use;

SPECIAL SAFETY REGULATIONS

- adjustement and repairs must be carried out only by personnel qualified. Repair carried out by unskilled personnel may be dangerous;
- perfect washing-up results as far as hygiene concerns and a correct operation of the washing machine can be assured only in case the instructions reported in the present handbook are carefully followed;
- the machine must be only used by authorized personnel which must comply with sanitary measures;
- do not leave the machine in an environment with temperatures lower than to 0°C;
- the machine protection degree is IP21, therefore it should not be washed with direct high pressure jets of water;

Fate conoscenza con l'apparecchio
Faites connaissance avec l'appareil
Learn to use the appliance
Wollen Sie den Apparat kennenlernen


Lavaggio superiore rotante in acciaio inox
Lavage supérieur rotatif en acier inoxydable
Stainless steel Upper rotating washing
Rotierend Oberer Wascharm aus CNS
Risciacquo superiore rotante in acciaio inox (cono 90°)
Rinçage supérieur rotatif en acier inoxydable (cône 90°)
Stainless steel Upper rotating rinsing (cone 90°)
Rotierendes Oberes Spülsystem aus CNS (Konus 90°)
Risciacquo inferiore rotante in acciaio inox (cono 90°)
Rinçage inférieur rotatif en acier inoxydable (cône 90°)
Stainless steel Lower rotating rinsing (cone 90°)
Rotierender Unteres Spülsystem aus CNS (Konus 90°)
Lavaggio inferiore rotante in acciaio inox
Lavage inférieur rotatif en acier inoxydable
Stainless steel Lower rotating washing
Rotierender Unterer Wascharm aus CNS
Filtri vasca in acciaio inox
Filtres cuve en acier inoxydable
Stainless steel Tank filters
Herausnehmbare Schmutzauffangfilter über dem Waschtank
Troppopieno
Trop-plein
Overflow
Überlaufrohr
Filtro aspirazione pompa in acciaio inox
Filtre aspiration pompe en acier inoxydable
Stainless steel Suction pump filter
Pumpenansaugfilter aus Inox
Scarico vasca ø 32mm
Vidange cuve ø 32mm
Water outlet ø 32mm
Ablauf ø 32mm
Entrata acqua 3/4"
Entrée de 'eau 3/4"
Water inlet 3/4"
Wasseranschluss 3/4"
Doppia parete coibentata 20mm
Double paroi isolée 20mm
Double skin with insulation 20mm
Doppelwandige Isolation 20 mm
Vasca a "sedia" con fondo inclinato e spigoli arrotondati
Cuve inclinée avec angles arrondis
Tank with slanting bottom
Waschtank mit Gefälle komplett abgerundet
Doppia parete coibentata 14m
Double paroi isolée 14mm
Double skin with insulation 14mm
Doppelwandige Isolation 14mm
Boiler coibentato in acciaio inox
Surchauffeur isolé en acier inox
Stainless steel Boiler with insulation
Isolierter Boiler aus CNS
Dosatore additivo di risciacquo
Doseur de produit pour rinçage
Rinse-aid dispenser
Nachspülmitteldosiergerät
Pompa autosvuotante
Pompe autovidangeable
Autodraining washing pump
Pumpenmotor
Telaio,vasca e capot in acciaio inossidabile
Châssis, cuve et capot en acier inoxydable
Body,tank and Top in Stainless steel construction
Gehäuserahmen und Verblendungen aus Inox

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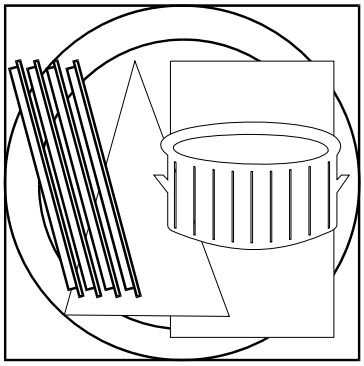
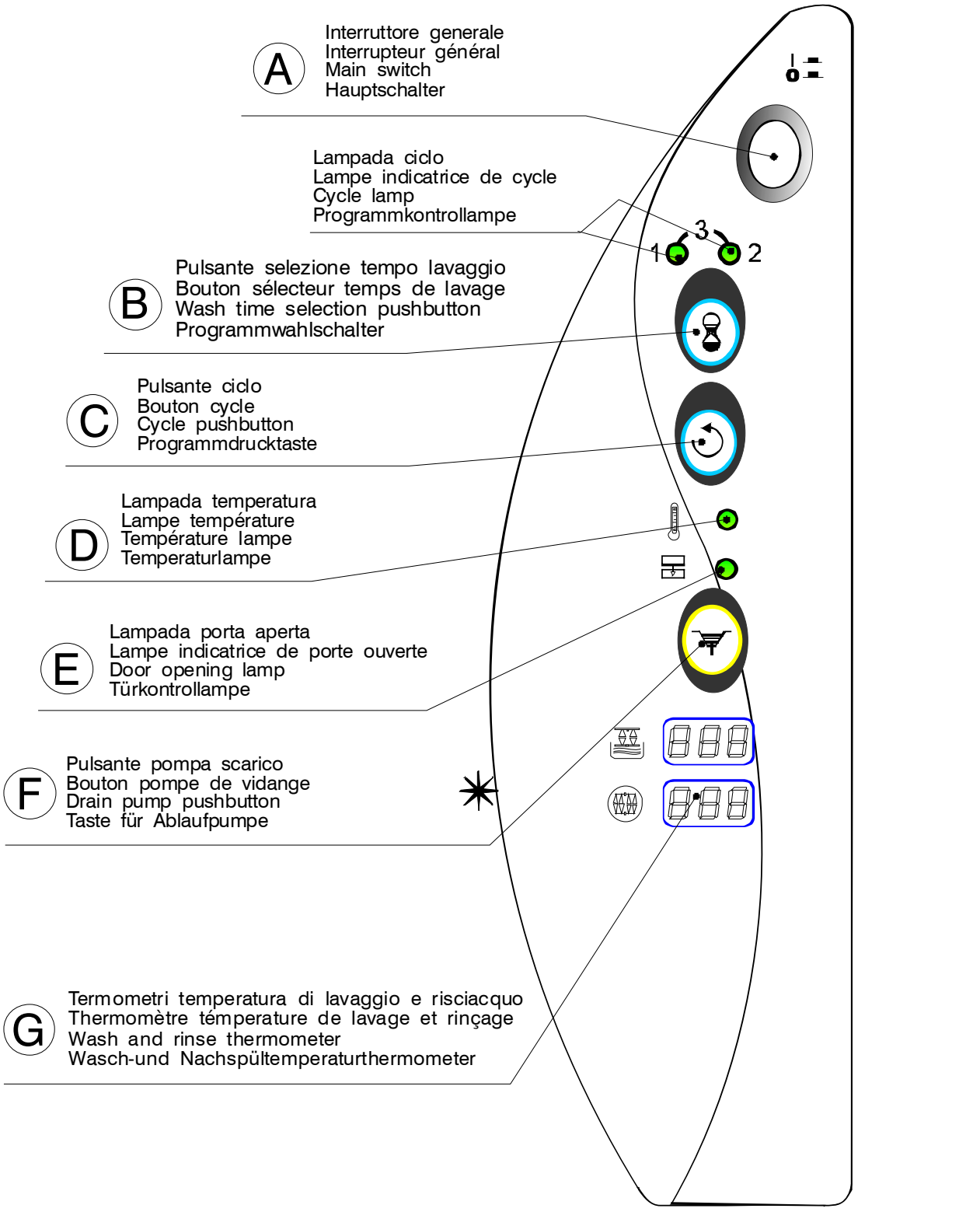
INSTRUCTIONS FOR THE USER



7

PANNELLO COMANDI ▪ EMPLOI CONTROLES
CONTROL PANEL ▪ STEUERTAFEL



Dis.1

OPTIONAL

ENGLISH

First Section - FOR THE USER

WORKING AND USE

NOTE:
- When the objects to be washed present burnt crusts, or a long time is elapsed from cooking up to the time of washing, it is necessary to make a previous softening in water at 50°C, by using an appropriate softeningproducts;
- Never deep naked hands in detergent water;
- While the machine is running, never open the door too rapidly;
- Only use specific anti-frothing detergents.

OPERATION BEFORE WASHING

BEFORE STARTING THE WORKING OPERATION BE SURE THAT:

- the cock is open;
- the filters and the overflow are in their housings;
- the wash arm and the rinse arm are free to pivot;
- brightener and washing powder dispenser containers are loaded.

THEN PROCEED:

A - Put the detergent directly into the tank, by paying attention to distribute it uniformly on the filters, the quantity being according to supplier's instructions.

N.B. When using chlorinated detergent, it is suggested to use an automatic dispenser; if otherwise, brownish spots might appear on the surfaces, because of chlorine reactions, if powering the detergent directly in the tank.

B - Place the objects in the basket minding to previously remove all solid waste and fat.

N.B.: When the objects to be washed present burnt crusts, or a long time is elapsed from cooking up tothe time of washing, it is necessary to make a previous softening in water at 50°C, by using an appropriate softening product.

C - Turn the machines on by wall switch and push the switch **"A**" situated in Dis.1.
At this moment the thermometer display lights up And the tank fills up. When the tank is full the control lamp for cycle "2" lights up.

D – Introduce the basket in the ware-washer.

*The control lamp "**E**" will flash in case the door of the dishwasher is open.*

Before you start the cycle be sure that the control lamp "**D**" is flashing. This means that the water for the washing cycle and the rinsing water

temperature reached the ideal temperature for working.

E – Choose the washing period cycle and push the button "**B**" between the following items:
- lamp 1 flashing – short cycle of 2 minutes
- lamp 2 flashing – medium cycle 3 minutes
- lamps 1 and 2 lightening at the same time long cycle of 4 minutes.

The washing period cycle has to be chosen regarding the dirt that has to be removed.

F – Close the door of the ware-washer.
Push the button cycle "**C**"
The dishwasher starts the washing with the period you chosen. Additional to this period will be a pause of 5 seconds and a rinsing period of 23 seconds with clean water about 85° to 90°C.
The control cycle lamp is flashing up to the end of the complete washing period. Finished the washing period the control lamps will stop lightening.

It is possible to interrupt the washing cycle at any time simply pushing again button *"B".*

The lighting of the control lamp "D" means that the water reached the needed temperature of 85° to 90°C.
The **rinsing** will start working of by the reached temperature need. That means the period of the washing cycle you chosed will be extended up to having reached the exact temperature (thermocontrol).

G - Take away the basket .
In order to make washing keep on, load another basket and press pushbutton **"C"**. The cycle will automatically start again.

- **Endless cycle (maximum 15 minutes)** : the door being closed and the cycle put on (any cycle), keep the button **"B"** pressed for 3 seconds: lamps 1 and 2 will flash at the same time (thermocontrol excluded); the cycle can be interrupted at any time pressing again button **"C"** that will let final sequences start.

Self-washing cycle: with machine on, carry out the following operations:

- Remove the overflow from the tank and wait for the tank's emptying (for machines with drain pump, look at the instructions in the specific paragraph),
- Close the door of the dishwasher,
- Keep pressed the cycle button ''C'' during 3 seconds: lamp ''2'' flashes during all the length of the 5 or 10 minutes cycle, according to the rinse's duration fixed by default.

DURING WASHING

1) When the machine is running never change wash time selector position.

2) Only use specific anti-frothing detergents

3) Deactivate the equipment in case of fault or malfunction. For repairs, only address to a technical assistance center authorised by the manufacturer and impose the use of original spare parts.

If these conditions are not met, the equipment safety could be jeopardised.

ACHIEVEMENTS

Any deficiency in the washing process is apparent when dirty residuals are visible. Any halos might be caused by an insufficient rinsing: in this case, check that the rinsing jets are clean and there is a sufficient pressure in the water distribution network.
In the case that residuals are present, check that:
• the washing jets are clean
• there is detergent
• the pump suction filter is clean
• the positions of the objects in the rack are correct.

CLEANSING AGENTS

Choice of the suitable cleansing agent is an essential condition if you want to obtain extremely good washing results as concerns hygienic results. It is then important to consider some points. First of all only highly alkaline and chlorine-active antifoam products, especially made for industrial dish-washing machines, must be used and they must be produced by well known reliable Firms. Mean concentration of the cleansing agents in powder must be 1,5-2,5 g/lt. Mean concentration of liquid cleansing agents nust be 2-4 g/lt.

In order to avoid scales and corrosions, put cleansing agent above water level on the nearest area of the sucking pump filter, in this way it will immediately dilute and will not deposit on the tank bottom.

DRAIN PUMP INSTRUCTIONS

(only for machines with drain pump)

The drain pump works automatically only during the washing cycle to discharge the exceeding water coming from the rinsing cycle.

At the end of the working day, in order to completely discharge the tank, it is necessary to perform the following operations:

1. Open the door of the Ware-washer;
2. Remove the overflow pipe from the tank;
3 . Afterwards push button **"F" for 3 seconds.**

Control lamp "**E**" and the cycle lamp (the last chosen) are flashing alternatively.

The discharge will stop automatically after 5 minutes. Control lamps will stop flashing.

The drain can be stopped at any time by pressing again button ''F'' .

Reinstall the overflow and shut the hood.

RINSING ADDITIVES

To grant a perfect rinsing, a quick drying and to avoid calcareous sediments on glasses and cups you must add a surfactant on water (Brightner).

Your cleansing agent supplier's will be able to suggest the most suitable product. Your machine is equipped with a rinse-aid dispenser. Mean concentration used is 0,15 g/lt.

CLEANING AND PREVENTIVE MAINTENANCE

PRECAUTION AND CLEANING INSTRUCTIONS

- **IMPORTANT** : Before carrying out the cleaning and maintenance operations, disconnect the equipment from the mains power supply:
- high temperatures can be reached inside the machine (90°C). After the power supply has been removed, wait until the machine has reached room temperature, before working on it.
- the machine protection degree is IP21, therefore it should not be washed with direct high pressure jets of water;
- never leave tools, parts or other loose material on in or on the machine;
- BEFORE starting machine or cycle, after any maintenance or repair work, make sure all protectives are correctly installed;

DAILY MAINTENANCE

- Disconnect the machine with pushbutton "A";
- Lift the overflow pipe and let the water drain out of the tank;
- Wash thoroughly the tank and the filters housing to remove all impurities;
- Take the filters out and clean them under running water;
- Re-assemble the overflow pipe and the filters in their housings;
- Check and clean the washing and the rinsing jets;
- Clean the outer surface of the machine by using a wet sponge; do not use water jets because, beside being dangerous they could damage the electrical parts; do not use abrasive detergents;
- When the machine is to remain idle for a long time, drain all the water from the boiler and from the electropump. Also leave the door open.

NEVER WASH THE EXTERNAL PART OF THE MACHINE WITH A WATER JET

POSSIBLE TROUBLES - CAUSES - SOLUTIONS

PROBLEMS	CAUSES	SOLUTIONS
The machine doesn't catch	Main switch is switched off;	Turn ON the main switch;
The water doesn't go in	Water cock closed;	Open water cock;
	The Overflow is not in place;	Reassemble the Overflow in place;
Insufficient Washing	Wrong detergent or dosage insufficient;	Use anti-foam detergent in the right dosage and never with cold water;
	Low temperature in the tank;	Wait untill the water gets hot;
	Dirty wash filter;	Clean filter;
Insufficient Rinsing	Rinsing nozzles blocked;	Unscrew and clean nozzles under running water;
	Hydraulic pressure lower than 1 bar - 100 kPa;	Wait untill the pressure is on or buy a booster pump;

CAUTION! FOR ANY OTHER TROUBLE, CALL SERVICE

DESCALING

When hard water is used you can find, inside the machine and also on dishes, calcareous sediments which must be removed both for hygienic and operating reasons by a descaling operation.
Operating process and frequency of this intervention are suggested by your cleansing agent supplier who has suitable products, generally containing phosphoric acid.
In order to avoid damage to the machine do not increase the quantities and once operations end rinse abundantly.

SANIFICATION

At last each 30 days it would be useful to do this operation which guarantees the complete hygienic conditions of the machine. We suggest to contact your cleansing agent supplier who will give you quantity and name of the most suitable product you can use and that, generally, is an active chloride powder (100-200 ppm).
In order to avoid damage to the machine do not increase the quantities and once operations end, rinse abundantly.

USEFUL HINTS OF STAINLESS STEEL MAINTENANCE

Stainless steel is so called because it is not affected by oxidation,this is due to a thin molecular layer of oxide on the surface which protects againts further oxidation. There are, howevwr, substances which can modify or destroy this layer,giving rise to corrosion:besides preventing the protective film of oxide from reforming,these substances corrode the stainless steel itself and can cause irreparable damage. It is therefore necessary to prevent this by choosing correct cleaning products and by complying with the following simple recommendations:**never forget that when using these appliances,the first and fundamental rule is to guarantee that the cleaning products are both non-toxic and hygienic.**

Before using any detergent to clean either the stainless steel or the immediate and sorrounding floor area, always ask your supplier for the most suitable product which does not cause corrosion on the steel itself; the onset of rust is most commonly caused by the use of unsuitable cleaning materials (strongly acid chlorate based detergents) or on inadequate maintenance.

Our appliances are made of stainless steel AISI 304 (18-10 type) for exterior panelling,upper tops,tanks etc.
Comply with the following instructions when cleaning and servicing parts in stainless steel.

Ordinary daily maintenance
Carefully and frequently clean the surfaces using a damp cloth; use soap and water or normal detergents,**so long as these do not contain abrasives or chlorine based substances** such as sodium hypochlorite (bleech),hydrochloric acid or other such solutions:These products quickly and irreparably corrode stainless steel. When cleaning floors underneath or near the appliances, never use the above mentioned products as vapours or splashes could subject the steel to similar destructive effects.
Only ever rub in the direction of the satining, then thoroughly rinse with clean water and carefully dry.

Rust : water supply pipes, inevitably convey particles of rust dissolved in the water especially in new installation plants or when taps are opened after a period of inactivity. These iron deposits must not be allowed to remain on the stainless steel since they produce rust by contamination.
Use suitable products to remove any rust marks,from companies which produce detergents for industrial use. After application, thoroughly rinse with clean water, neutralizing the action of the product with an alkaline detergent normally used to clean such appliances or with another specific product.

DO NOT USE METAL MATS TO CLEAN THE STAINLESS STEEL